# DTV Setup

- **To watch digitally broadcast programs, purchase/connect a digital SET-TOP BOX.**
- **You can select only the 16:9 picture format in DTV 720p/1080i mode.**

How to connect a user-supplied Digital Set-top Box

- You can use either the Monitor's COMPONENT (Y, P_b, P_r) inputs or the single RGB-DTV INPUT for video connections, depending on your Set Top Box connectors. Then, make the corresponding Audio connections. See the diagram below for either set up.

\<Back panel of the Monitor\>

or

< Back panel of a digital SET-TOP BOX>
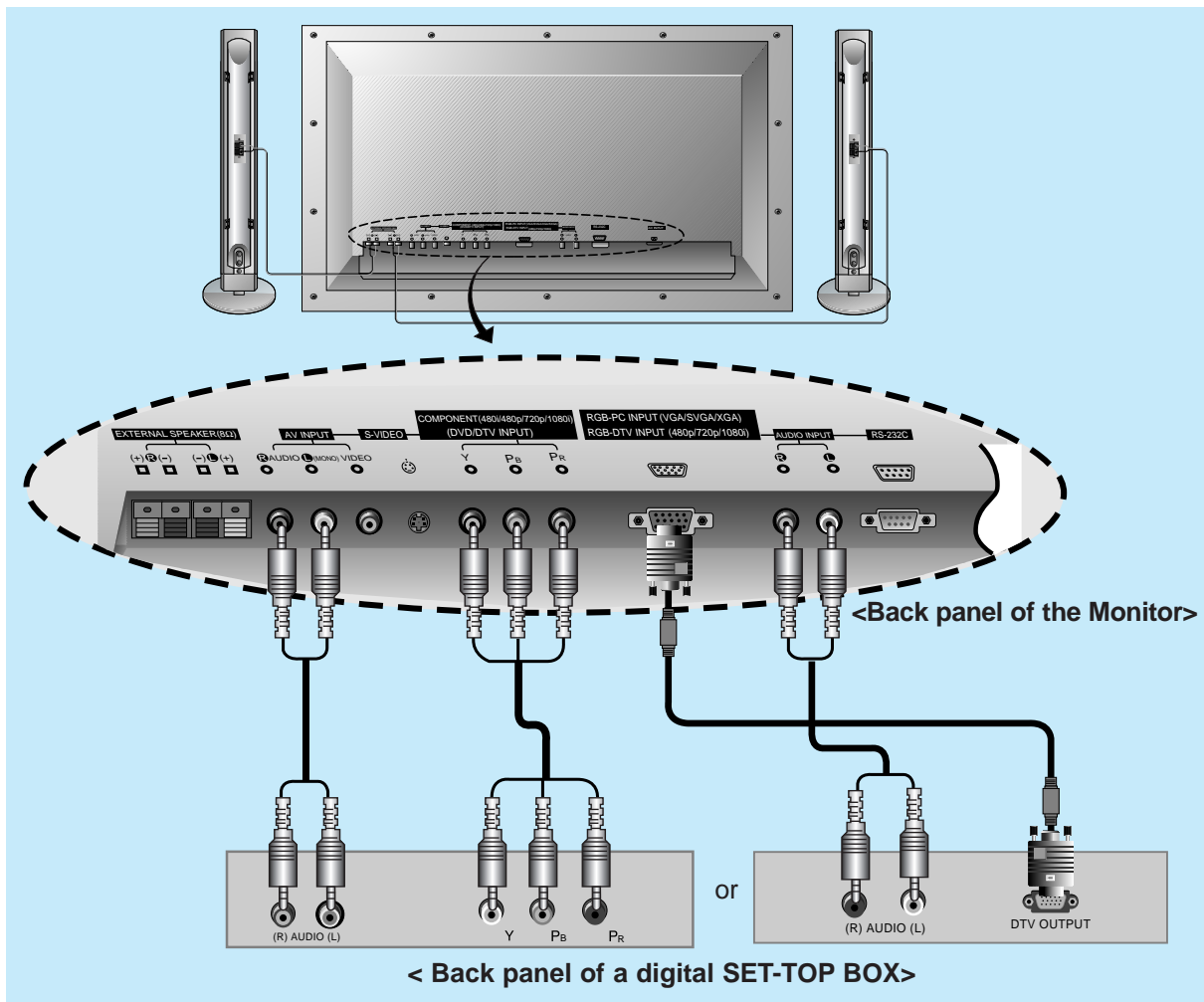
How to use

- Turn on the digital SET-TOP BOX.
  (Refer to the owner's manual for the digital SET-TOP BOX.)
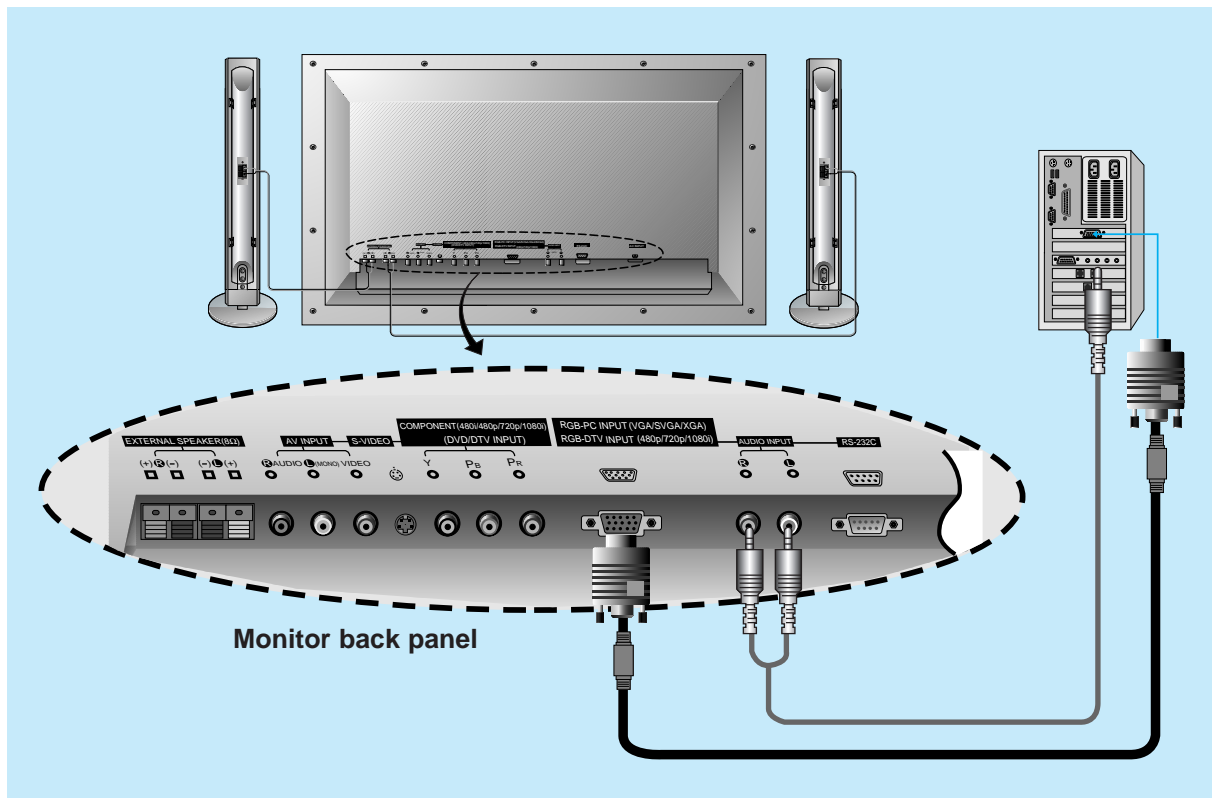- Press **INPUT SELECT** button on the remote control to select **COMPONENT** or **RGB**.

PC Setup

- **See your computer's image on the monitor.**

How to connect

Make the connections shown in the illustration below.
- Set the computer video output to SXGA (1280x1024) or lower resolution. (If the video output of the PC is not compatible with the Monitor, no picture will appear on the Monitor. See page 21.)
- As shown below, connect the video output of the PC to the Monitor RGB-PC INPUT(VGA/SVGA/XGA) RGB-DTV INPUT(480p/720p/1080i).
- Connect the audio out from the PC to the Audio jacks on the Monitor. (Audio cables not included with the Monitor)
- **If available, adjust PC sound to your preference.**
- To setup this monitor in your PC Windows environment, select Normal, Standard or Default monitor. This monitor does not support Plug and Play function.

Monitor back panel

How to use

INPUT SELECT

On the remote control

- Press **POWER** button on the PC and press **ON/OFF** button on the Monitor. After this press ⏻/| button on the Monitor or press **POWER** button on the remote control.
- Press **INPUT SELECT** button on the remote control to select **RGB**.
- Set the resolution of PC to XGA (1024x768) or lower. (Refer to page 21.)

Tips

- Avoid prolonged display of a still image, as it may cause a permanent image to remain even after you change the image.

● **Displayable Monitor Specification**

Resolution	Horizontal Frequency (KHz)	Vertical Frequency (Hz)
640x350	31.468	70.09
	37.861	85.08
640x400	31.469	70.08
	37.927	85.03
640x480	31.469	59.94
	35.000	66.66
	37.861	72.80
	37.500	75.00
	43.269	85.00
	45.913	90.03
	53.011	100.04
	64.062	120.00
800x600	35.156	56.25
	37.879	60.31
	48.077	72.18
	46.875	75.00
	53.674	85.06
	56.000	90.00
	64.016	100.00
832x624	49.725	74.55
1024x768	48.363	60.00
	56.476	70.06
	60.023	75.02
	68.677	84.99

Tips

• Synchronization input form : separate

PC Mode Feature Check (Overview)

- **Select RGB first, see page 11.**
- **Make sure the PC and monitor are both turned on.**
- **Use the monitor's remote control to make adjustments.**

MENU

1 Press the **MENU** button to show a menu on screen.
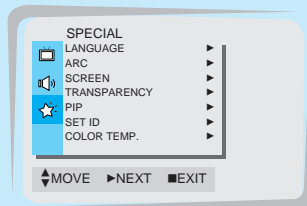
2 Press the ▲ / ▼ button to select a menu.

• Each press will cycle through the different menus as shown below.

```
PICTURE
APC               ►
DRP               ►
CONTRAST      85  ►
BRIGHTNESS    50  ►
COLOR          50  ►
TINT            0  ►
SHARPNESS      50  ►

MOVE  ►NEXT  ■EXIT
```
<Picture menu>

```
SOUND
DASP              ►
AVL               ►
TREBLE         50  ►
BASS           50  ►
BALANCE         0  ►

MOVE  ►NEXT  ■EXIT
```
<Sound menu>

```
SPECIAL
LANGUAGE          ►
ARC               ►
SCREEN            ►
TRANSPARENCY      ►
PIP               ►
SET ID            ►
COLOR TEMP.       ►

MOVE  ►NEXT  ■EXIT
```
<Special menu>

- Only adjust **Color Temperature** function in MU-42PZ15 series models.

VOL ◁   VOL ▷

3 Press the ► button and then press the ▲ / ▼ or ◄ / ► buttons to select a feature you want to use.

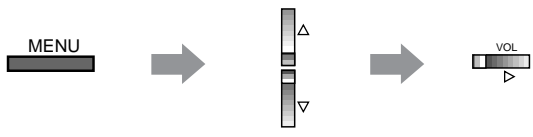• Press the **OK** button to exit menus.

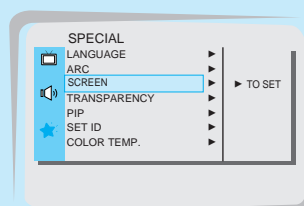# PC Mode Adjustments

Auto adjustment

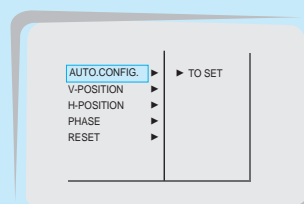**- Automatically adjusts picture position and eliminates any image shaking.**

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ► button.

MENU   △ ▽   VOL ▷

1 Press the ▲ / ▼ button to select **SCREEN** and then press the ► button.

△ ▽   VOL ▷

SPECIAL
LANGUAGE   ►
ARC   ►
SCREEN   ►   ► TO SET
TRANSPARENCY ►
PIP   ►
SET ID   ►
COLOR TEMP.   ►

2 Press the ▲ / ▼ button to select **AUTO.CONFIG.** and then press the ► button.

△ ▽   VOL ▷

AUTO.CONFIG. ►   ► TO SET
V-POSITION   ►
H-POSITION   ►
PHASE   ►
RESET   ►

• When **AUTO.CONFIG.** has finished, "**OK**" will be shown on screen.
• If the position of the image is incorrect, try Auto adjustment again.

3 If picture needs to be adjusted more after Auto adjustment, you can manually adjust the image position and **PHASE**.

Tips

• If the image is still not correct, your Monitor is functioning properly but needs further adjustment.
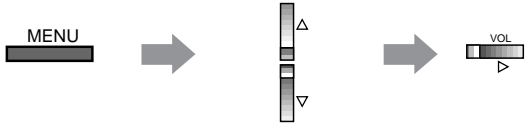
23

PC Mode Adjustments

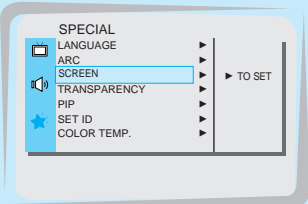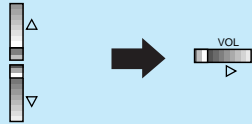## Adjusting horizontal / vertical position manually

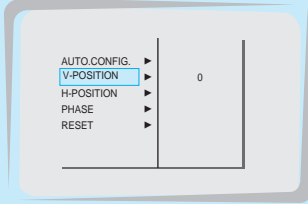**- Only adjust V-POSITION and H-POSITION in DTV or component 480p/720p/1080i.**

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ► button.

MENU ➡ △ ▽ ➡ VOL ▷

1 Press the ▲ / ▼ button to select **SCREEN** and then press the ► button.

△ ▽ ➡ VOL ▷

```
SPECIAL
  LANGUAGE      ►
  ARC           ►
  SCREEN        ►      ► TO SET
  TRANSPARENCY  ►
  PIP           ►
  SET ID        ►
  COLOR TEMP.   ►
```

2 Press the ▲ / ▼ button to select **V-POSITION** or **H-POSITION** and then press the ► button.

△ ▽ ➡ VOL ▷

```
AUTO.CONFIG.  ►
V-POSITION    ►        0
H-POSITION    ►
PHASE         ►
RESET         ►
```

3 Press the ◄ / ► buttons to adjust until you get desired horizontal or vertical position and then press the **OK** button to remove menus.

- The adjustment range of **V-POSITION** is -50 ~ +50.
- The adjustment range of **H-POSITION** is -100 ~ +100.
- Based on the input mode, the adjustment range of **V-POSITION/H-POSITION** may change.
- Based on the VGA card, the adjustment range of **V-POSITION/H-POSITION** may be out of -100 ~ +100 after auto configure.
- Based on the input signal, the position of the picture may not change even though you have adjusted the horizontal or vertical position with this function.

VOL ◁ VOL ▷ ➡ OK

Picture Phase Adjustments

- If the picture isn't clear after auto adjustment and especially if the characters are still trembling, then adjust the picture phase manually.
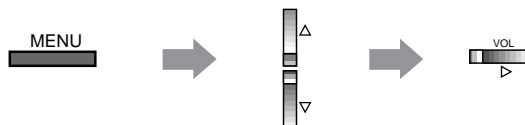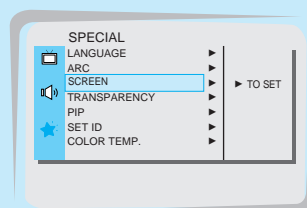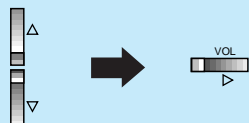- When watching PIP, the **SCREEN** menu option is not available.

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ► button.

MENU   △▽   VOL ▷

1
Press the ▲ / ▼ button to select **SCREEN** and then press the ► button.

△▽   VOL ▷

```
SPECIAL
  LANGUAGE        ►
  ARC             ►
  SCREEN          ►      ► TO SET
  TRANSPARENCY    ►
  PIP             ►
  SET ID          ►
  COLOR TEMP.     ►
```

2
Press the ▲ / ▼ button to select **PHASE** and then press the ► button.

△▽   VOL ▷

```
  AUTO.CONFIG.   ►
  V-POSITION     ►
  H-POSITION     ►
  PHASE          ►      30
  RESET          ►
```
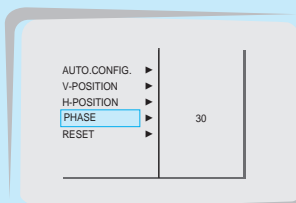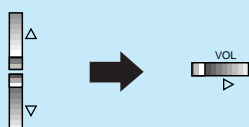
3
Press the ◄ / ► button to adjust phase and then press the **OK** button.
- The adjustment range of **PHASE** is 0 ~ 63.

VOL ◁   VOL ▷   OK

Initializing (Reset to factory value)

- To initialize the adjusted value, select **RESET** with the ▲ / ▼ button and then press the ► button.

Picture In Picture (PIP) function

- **PIP lets you view 2 different inputs (sources) on your monitor screen at the same time. One source will be large, and the other source will show a smaller inset image.**
- **Select RGB input source before pressing PIP.**
- **This function works only in the following resolutions;**
  640x480, 800x600, 1024x768 (only in Vertical frequency 60 Hz)
- **When you select RGB or DTV for main picture in PIP, you can watch video, cable TV or DVD for sub picture.**
- **Color of main picture may be different from PIP's in PIP mode.**
- **If input source for main picture is changed while in PIP mode, sub picture will disappear.**
- **When watching PIP, SCREEN option is not available in Special menu.**
- **With PIP active, not all picture formats can be used for the main/sub picture.**

Watching the PIP (Picture in Picture)

PIP
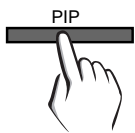
Press the **PIP** button.

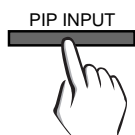- Each time you press **PIP** or ◄ / ► button, you can change the PIP size as below.

| PIP[S] | ◄──► | PIP [L] | ◄──► | OFF |

PIP ◄ PIP [S] ►

<Small PIP>

PIP ◄ PIP [L] ►

<Large PIP>

PIP ◄ OFF ►

<Off>

Selecting the source input signal

PIP INPUT

Press the **PIP INPUT** button in PIP mode.

- Each time you press **PIP INPUT** button, you toggle **VIDEO**, **S-VIDEO** and **COMPONENT**.

VIDEO	→	S-VIDEO	→	COMPONENT

COMPONENT source only works in 480i mode.

PIP INPUT ◄ VIDEO ►

Moving the Sub (inset) picture
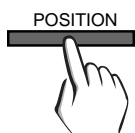
POSITION

Press the **POSITION** button in PIP mode.

- Each press of the **POSITION** button will change the position of the sub picture on the screen as shown below.

Picture In Picture (PIP) function

Selecting PIP sound options

- **To select main or sub (inset) sound**
- **This function only works with the following resolutions;**
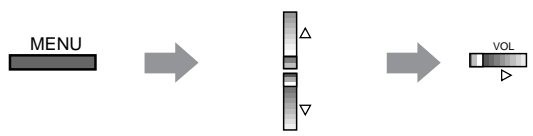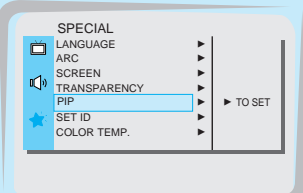 **640x480, 800x600, 1024x768 (only in Vertical frequency 60 Hz)**
- **To use this function, connect PC/DTV video output to RGB-PC INPUT/RGB-DTV INPUT and connect PC/DTV audio outputs to AUDIO INPUT.**
- **SOUND SELECT is always the main picture sound (SOUND[M]) regardless of prior sound choice.**
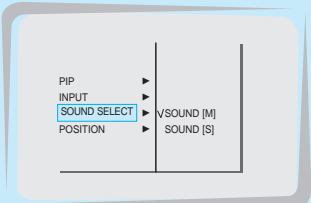
READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ► button.

MENU

VOL

1 Use the ▲ / ▼ buttons to select **PIP** and then press the ► button.

VOL

SPECIAL
LANGUAGE   ►
ARC   ►
SCREEN   ►
TRANSPARENCY   ►
PIP   ►   ► TO SET
SET ID   ►
COLOR TEMP.   ►
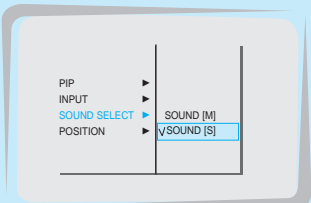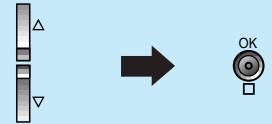
2 Press the ▲ / ▼ button to select **SOUND SELECT** and then press the ► button.

VOL

PIP   ►
INPUT   ►
SOUND SELECT   ►   √SOUND [M]
POSITION   ►   SOUND [S]

3 Press the ▲ / ▼ buttons to select main image sound (**SOUND [M]**) or PIP (inset image) sound (**SOUND [S]**) and then press the **OK** button.

- Each time you press ▲ / ▼ button, you toggle between **SOUND [M]** or **SOUND [S]**.

OK

PIP   ►
INPUT   ►
SOUND SELECT   ►   SOUND [M]
POSITION   ►   √SOUND [S]

Using the remote control

Safety instructions

Monitor Overview

Connections

Basic operation

Sleep timer

Picture & Sound

Special features

Others

Installing batteries
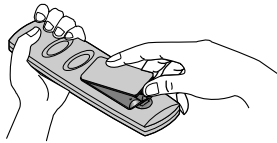
- Open the battery compartment cover on the back of the remote control and insert the batteries with correct polarity, match "+" with "+", and match "-" with "-".

- Install two 1.5V "AAA" alkaline batteries. Don't mix used batteries with new batteries.

Notes for using the remote control

Make sure these are no objects between the remote control and its sensor.
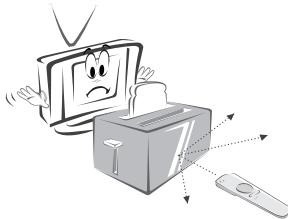
Don't place the remote control near a heater or damp place. Strong impact on the remote control may cause operation failure.

Signal from the remote control may be disturbed by sun light or other strong light. In this case, turn the set to other direction.

Turning on the Monitor

- **When using the remote control, aim it at its sensor on the Monitor.**

Turning on the Monitor just after installation

1 Connect power cord correctly.

2 Press the main **ON/OFF** button on the Monitor. At this moment, the Monitor is switched to standby mode. Press the ⏻/| or **INPUT SELECT** button on the Monitor or press the **POWER** or **INPUT SELECT** button on the remote control and then the Monitor will be turned on.

Turning on the Monitor (power cord is still connected)

1 **If the Monitor is turned off with the ⏻/| button on the Monitor**

Press the ⏻/| or **INPUT SELECT** button on the Monitor or press the **POWER** or **INPUT SELECT** button on the remote control and then the Monitor will be turned on.

2 **If the Monitor is turned off with the ON/OFF button on the Monitor**

• Press the main **ON/OFF** button on the Monitor to turn on the Monitor.

3 **If the Monitor is turned off with the remote control and also the ON/OFF button on the Monitor**

• Press the main **ON/OFF** button on the Monitor and then press the ⏻/| or **INPUT SELECT** button on the Monitor or press the **POWER** or **INPUT SELECT** button on the remote control and then the Monitor will be turned on.

Tips

• **Adjusting volume level**
The volume(▶) button increases the sound and the volume(◀) button reduces the level of sound.

Selecting language for the menus

Safety instructions

Monitor Overview

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Basic operation

Sleep timer

Picture & Sound

Special features

Others

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ► button.

MENU

VOL
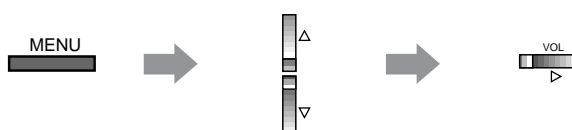
1 Press the ▲ / ▼ button to select **LAN-GUAGE** and then press the ► button.

VOL

SPECIAL
LANGUAGE   ►
ARC   ►   ✓ENGLISH
SCREEN   ►   ESPAÑOL
TRANSPARENCY   ►   PORTUGUÊS
PIP   ►   FRANÇAIS
SET ID   ►
COLOR TEMP.   ►
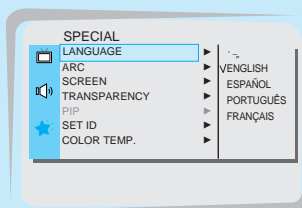
2 Press the ▲ / ▼ button to select the desired language.

SPECIAL
LANGUAGE   ►
ARC   ►   ✓ENGLISH
SCREEN   ►   ESPAÑOL
TRANSPARENCY   ►   PORTUGUÊS
PIP   ►   FRANÇAIS
SET ID   ►
COLOR TEMP.   ►

3 Press the **OK** button to exit.

OK
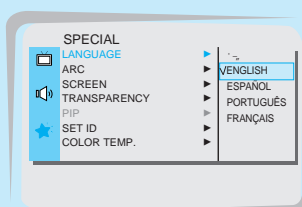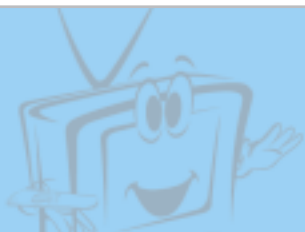
Checking features

- **Use the remote control to make adjustments.**
- **Select VIDEO input source**

MENU

1   Press the **MENU** button.

△
▽

2   Press the ▲ / ▼ button.
- Each press will cycle through the menus shown below.
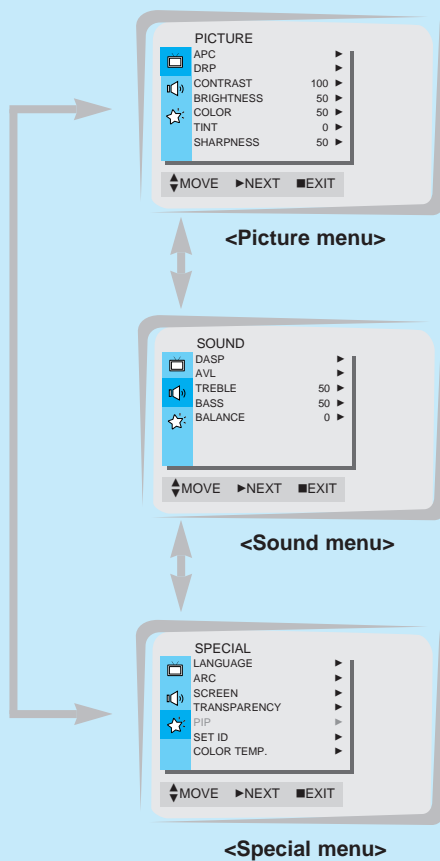
```
PICTURE
  APC              ►
  DRP              ►
  CONTRAST   100 ►
  BRIGHTNESS  50 ►
  COLOR        50 ►
  TINT          0 ►
  SHARPNESS    50 ►

 ♦MOVE  ►NEXT  ■EXIT
```
<Picture menu>

```
SOUND
  DASP             ►
  AVL              ►
  TREBLE       50 ►
  BASS         50 ►
  BALANCE       0 ►



 ♦MOVE  ►NEXT  ■EXIT
```
<Sound menu>

```
SPECIAL
  LANGUAGE       ►
  ARC            ►
  SCREEN         ►
  TRANSPARENCY   ►
  PIP            ►
  SET ID         ►
  COLOR TEMP.    ►

 ♦MOVE  ►NEXT  ■EXIT
```
<Special menu>

- Only adjust **Color Temperature** function in MU-42PZ15 series models.

△
▽
VOL ◁   VOL ▷

3   Press the ► button to select a feature to adjust, and then press the ▲ / ▼ or ◄ / ► buttons to adjust the selected item.
- Press the **OK** button to exit.

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Setting Sleep Timer
Sleep Timer turns the Monitor off after a preset time

SLEEP

Press the **SLEEP** button to set sleep time.
Each time you press **SLEEP** button, the next pre-set setting time is changed as follows:

◄ --- ► ▶ ◄ 10 ► ▶ ◄ 20 ► ▶ ◄ 30 ►

◄ 240 ►   ▼

◄ 180 ► ◄ ◄ 120 ► ◄ ◄ 90 ► ◄ ◄ 60 ►

SLEEP   ◄ 30 ►
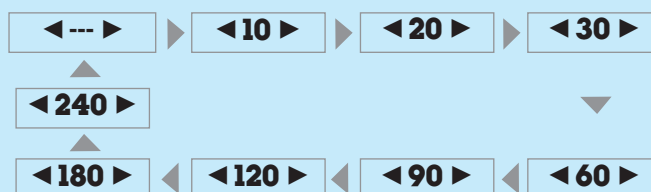
- To release sleep time setting, press the **SLEEP** or ◄ / ► button repeatedly to select ◄ --- ►.
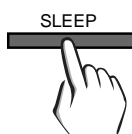- '⚠ **SLEEP 1**' will be displayed one minute before the Monitor is due to switch off.

Tips

- When the sleep time you want is displayed on the screen, don't press the **SLEEP** button. After 20 seconds, the screen display disappears and sleep time is set.
- To check remaining sleep time after setting, press the **SLEEP** or **OK** button just once.
- If you turn the Monitor off after setting the sleep timer, the setting is erased. The sleep timer will then have to be set again.

Auto picture control
Use APC to set the Monitor for the best picture appearance

- **APC is not available in RGB or PIP mode.**

⬤ **APC (Auto Picture Control)**

APC
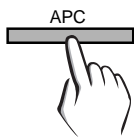
1 Press the **APC** button.

2 Press the **APC** or ◄ / ► buttons to select your desired picture condition.

APC	◄ CLEAR ►
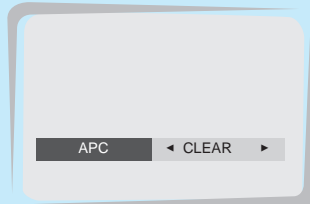
• Each press of ◄ / ► buttons changes the screen display as shown below.

CLEAR ◄──────► **SOFT** ◄──────► **USER**

• You can also select **CLEAR**, **SOFT** or **USER** in the **PIC-TURE** menu. User refers to adjustments you made to the picture menu items. See next page.

Adjusting picture appearance

- **PIP inset setting is not adjustable.**

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **PICTURE** menu.
Press the ► button.

MENU   △ ▽   VOL ▷

1 Example : Changing the contrast.
Press the ▲ / ▼ button to select **CON-TRAST** and then press the ► button.

△ ▽   VOL ▷

```
        PICTURE
   ▣    APC              ►
        DRP              ►
  ◁))   CONTRAST    100  ►
        BRIGHTNESS   50  ►
        COLOR        50  ►
   ☆    TINT          0  ►
        SHARPNESS    50  ►
```
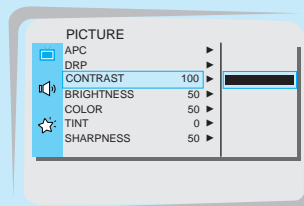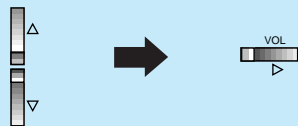
2 Use the ◄ / ► buttons to make appropriate adjustments and then press the **OK** button.

• Press the ▲ / ▼ buttons to select other items.

VOL ◁   VOL ▷   OK

```
        PICTURE
   ▣    APC              ►
        DRP              ►
  ◁))   CONTRAST     70  ►
        BRIGHTNESS   50  ►
        COLOR         0  ►
   ☆    TINT          0  ►
        SHARPNESS    50  ►
```
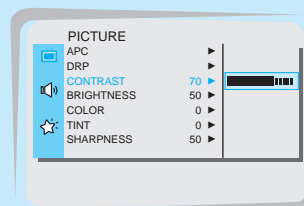
• Adjust **BRIGHTNESS**, **COLOR**, **TINT** and **SHARPNESS** in the same way.

DRP (Digital Reality Picture)

DRP improves image outlines in dark screens.

- **This function works in video, component 480i mode.**

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **PICTURE** menu.
Press the ► button.

MENU ➡ △ ▽ ➡ VOL ▷

---
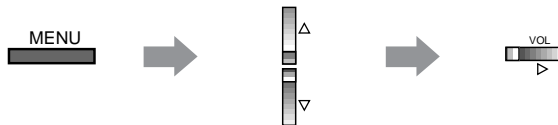
1 Press the ▲ / ▼ button to select **DRP** and then press the ► button.

△ ▽ ➡ VOL ▷

PICTURE		
APC	►	
DRP	►	√CLEAR
CONTRAST	100 ►	SOFT
BRIGHTNESS	50 ►	
COLOR	50 ►	
TINT	0 ►	
SHARPNESS	50 ►	

---

2 Press the ▲ / ▼ button to select **CLEAR** or **SOFT**.

△ ▽

PICTURE		
APC	►	
DRP	►	√CLEAR
CONTRAST	100 ►	SOFT
BRIGHTNESS	50 ►	
COLOR	50 ►	
TINT	0 ►	
SHARPNESS	50 ►	

---

3 Press the **OK** button to exit.

OK
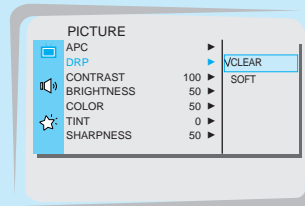
Adjusting sound
Manual setting

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SOUND** menu.
Press the ► button.

MENU

VOL ▷

1

Example : Adjustment treble
Use the ▲ / ▼ buttons to select **TREBLE** and then press the ► button.

VOL ▷

```
SOUND
   DASP          ►
   AVL           ►
   TREBLE    50  ►   ▬▬▬▮▮
   BASS      50  ►
   BALANCE    0  ►
```

2

Use the ◄ / ► buttons to make appropriate adjustment and then press the **OK** button to exit.
• Press the ▲ / ▼ buttons to select other options.

VOL ◁   VOL ▷

OK

```
SOUND
   DASP          ►
   AVL           ►
   TREBLE    70  ►   ▬▬▬▬▮
   BASS      50  ►
   BALANCE    0  ►
```
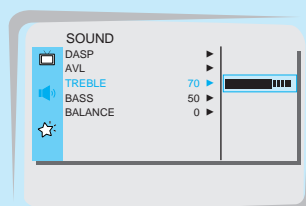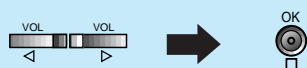
• Adjust **BASS** and **BALANCE** in the same way.

Auto Sound Control

● DASP (Digital Auto Sound Processing)

- This function lets you enjoy the best sound without any manual adjustment because the Monitor automatically selects the appropriate audio tone levels based on the program content.
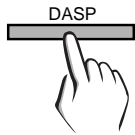
DASP

1 Press the **DASP** button.

2 Press the **DASP** or ◀ / ▶ buttons to select a sound setup.

| DASP | ◀ USER ▶ |

- Each press of **DASP** or ◀ / ▶ buttons changes the screen display as shown below.

FLAT ◀──▶ SPORTS ◀──▶ CINEMA
↑
USER ◀──▶ MUSIC
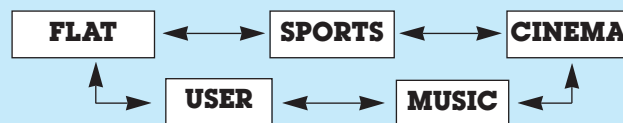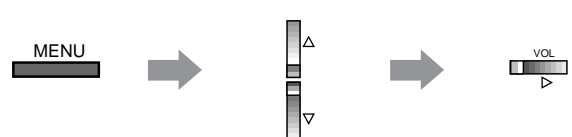
- You can also select **FLAT**, **SPORTS**, **CINEMA**, **MUSIC** or **USER** in the **SOUND** menu.

AVL (Auto Volume Leveler)
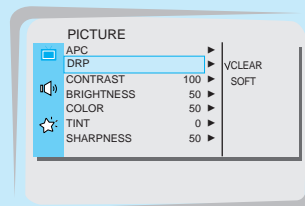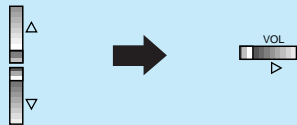**This feature maintains an equal volume level; even if you change channels.**

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SOUND** menu.
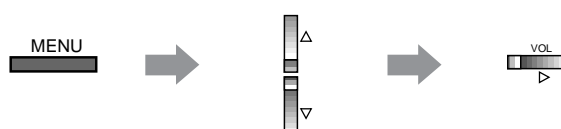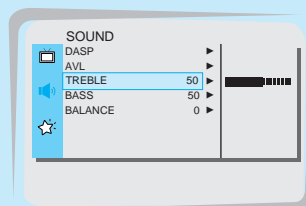Press the ► button.

MENU

VOL

1 Press the ▲ / ▼ button to select **AVL** and then press the ► button.

VOL

SOUND
DASP ►
AVL ► VON
TREBLE 50 ► OFF
BASS 50 ►
BALANCE 0 ►
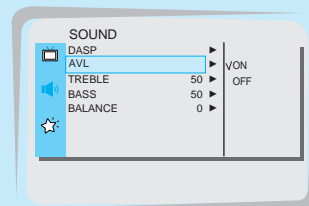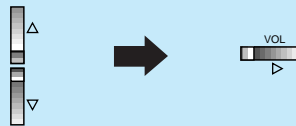
2 Press the ▲ / ▼ button to select **ON** or **OFF**.

SOUND
DASP ►
AVL ► VON
TREBLE 50 ► OFF
BASS 50 ►
BALANCE 0 ►

3 Press the **OK** button to exit.

OK

Using Still function

- **This feature isn't available for RGB input source.**
- **Use with A/V or COMPONENT video inputs.**
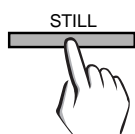
STILL

1 Press the **STILL** button.
- The image displayed is frozen(still).
- The sub picture is stilled in PIP mode.
- In PIP mode, the sub (inset) picture is frozen.

<Moving image>

<Still image>
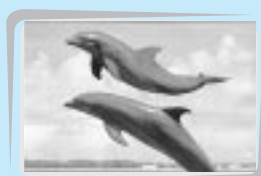
2 To return to normal viewing, press the **STILL** button again.

Tips

- If still picture is on the screen for more than 5 minutes, the image becomes dark.
  If another function is activated, normal brightness of the screen is restored.
- This is a protective feature designed to reduce a ghost image burning into the monitor.

Using the screen options

- **This function works only in the video mode.**
- **Use this option if there are a trembling or instability of a video tape on screen during viewing the video.**

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ▶ button.

MENU

VOL

1 Use the ▲ / ▼ button to select **SCREEN** and then press the ▶ button.

VOL

```
SPECIAL
  LANGUAGE        ▶
  ARC             ▶
  SCREEN          ▶   VTV
  TRANSPARENCY    ▶   VCR
  PIP             ▶
  SET ID          ▶
  COLOR TEMP.     ▶
```

2 Use the ▲ / ▼ buttons to select **TV** or **VCR**.

- Select the **VCR** option if watching a VCR.
- Select the **TV** option for other equipment.(Except VCR)
- Each time you press the ▲ / ▼ button you toggle between **TV** and **VCR**.

VOL

```
SPECIAL
  LANGUAGE        ▶
  ARC             ▶
  SCREEN          ▶   TV
  TRANSPARENCY    ▶   VVCR
  PIP             ▶
  SET ID          ▶
  COLOR TEMP.     ▶
```

3 Press the **OK** button to exit.

OK

Adjusting OSD Transparency

To make the menus clear or opaque

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ▶ button.

MENU

VOL
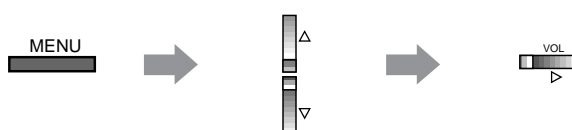
1 Press the ▲ / ▼ button to select **TRANSPARENCY** and then press the ▶ button.

VOL

SPECIAL
LANGUAGE   ▶
ARC   ▶
SCREEN   ▶
TRANSPARENCY ▶   3
PIP   ▶
SET ID   ▶
COLOR TEMP.   ▶
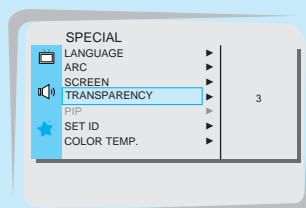
2 Press the ◀ / ▶ buttons to adjust OSD transparency.

• The adjustment range of **TRANSPARENCY** is 1 ~ 4.

VOL   VOL

SPECIAL
LANGUAGE   ▶
ARC   ▶
SCREEN   ▶
TRANSPARENCY ▶   3
PIP   ▶
SET ID   ▶
COLOR TEMP.   ▶

3 Press the **OK** button to exit.

OK
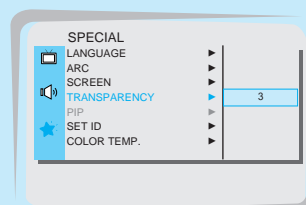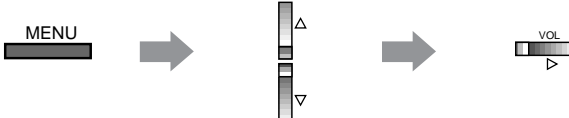
Adjusting color temperature

- Only adjust **Color Temperature** function in MU-42PZ15 series models.
- You should be adjust color temperature in PC mode again although color temperature is adjusted in other input source.
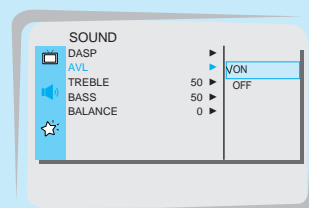- To initialize adjusted value, select '0' in **RED**, **GREEN** and **BLUE**.

READY

Press the **MENU** button and then press the ▲ / ▼ button to select **SPECIAL** menu.
Press the ► button.

MENU

VOL

1
Press the ▲ / ▼ button to select **COLOR TEMP.** and then press the ► button.

VOL

SPECIAL
LANGUAGE   ►
ARC   ►
SCREEN   ►
TRANSPARENCY   ►
PIP   ►
SET ID   ►
COLOR TEMP.   ►   ► TO SET
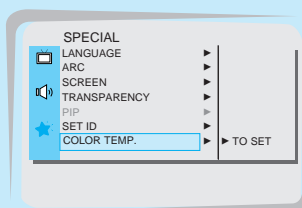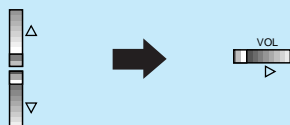
2
Press the ▲ / ▼ button to select **RED** and then press the ► button.
(to adjust RED setting)

VOL

RED   ►   0
GREEN   ►
BLUE   ►
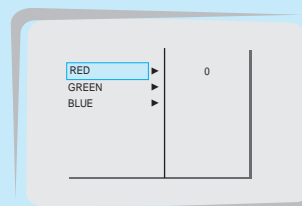
• Adjust **GREEN** and **BLUE** in the same way.

3
Use the ◄ / ► button to make appropriate adjustments and then press the **OK** button.

VOL   VOL   OK
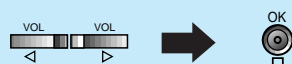
• The adjustment range of **RED**, **GREEN** and **BLUE** is -5 ~ +5.

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Setting picture format

- **With the RGB-PC input, you can select either 16:9 or 4:3 screen aspect ratios.**
- **With the RGB-DTV input, you can select 16:9 screen aspect ratios.**
- **If 4:3 mode is used for a long time, the outline of the image may remain on the screen after you change to the 16:9 screen.**
- **Don't display 4:3 picture format for more than 10 hours continuously.**

ARC
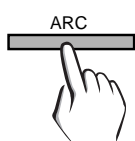
Press the **ARC** button to select a desired picture format.

- Each time you press **ARC** or ◄ / ► buttons, you can select **16:9**, **4:3** or **ZOOM** alternatively.

ARC ◄ 16 : 9 ►

<16:9>

ARC ◄ 4 : 3 ►

<4:3>

ARC ◄ ZOOM ►

<Zoom>

- You can also select **16:9**, **4:3** or **ZOOM** in the **SPECIAL** menu.

External Control Device Setup

- **Connect the RS-232C input jack to an external control device (such as a computer or an A/V control system) and control the Monitor's functions externally.**

How to connect external control equipment

- Connect the serial port of the control device to the RS-232C jack on the Monitor back panel.
- RS-232C connection cables are not supplied with the Monitor.
- The Monitor remote control and front panel controls (except main power) will not be functional if the Monitor is controlled by a PC computer or other external device.

EXTERNAL SPEAKER 8Ω   AV INPUT   S-VIDEO   COMPONENT(480i/480p/720p/1080i) (DVD/DTV INPUT)   RGB-PC INPUT (VGA/SVGA/XGA) RGB-DTV INPUT (480p/720p/1080i)   AUDIO INPUT   RS-232C   AC INPUT

(+) (−) (−) (+)   AUDIO (MONO) VIDEO   Y   PB   PR

Monitor Rear Connections Panel
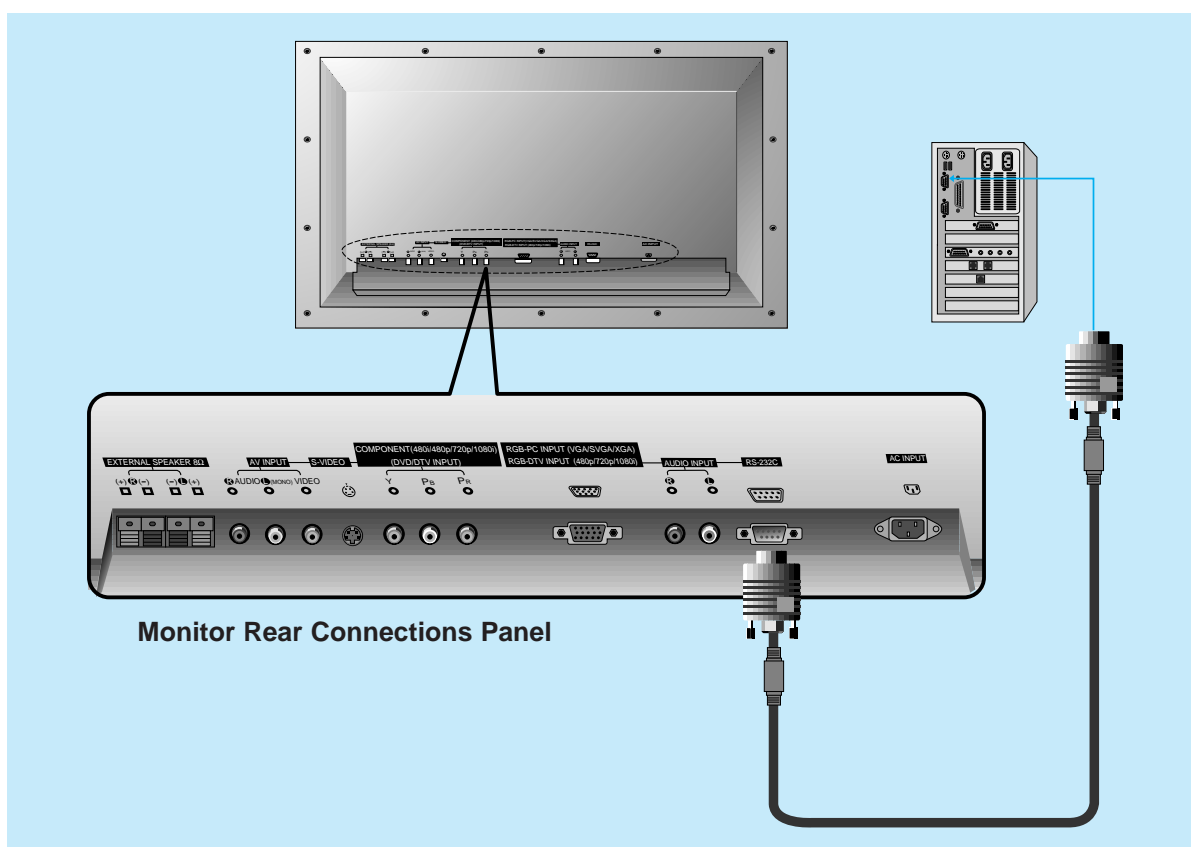
External Control Device Setup

Type of connector : D-Sub 9-pin male

No.	Pin name
1	No connection
2	RXD (Receive data)
3	TXD (Transmit data)
4	DTR (DTE side ready)
5	GND
6	DSR (DCE side ready)
7	RTS (Ready to send)
8	CTS (Clear to send)
9	No Connection

Pin No.4 and Pin No.6 must be connected on monitor side.
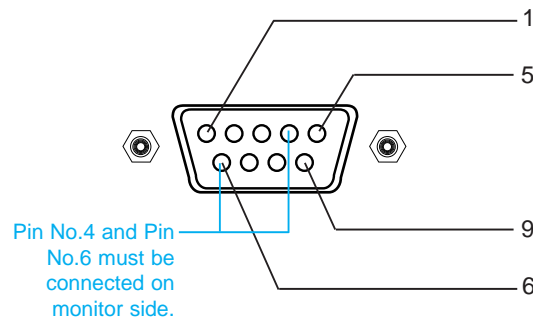
* Use a null modem cable.
Wire the 7-Wire cable so that each pair of data lines cross between the two devices. These data line pairs are RXD (Receive data) and TXD (Transmit data), DTR (DTE side ready) and DSR (DCE side ready), and RTS (Ready to send) and CTS (Clear to send).
When using the 3-Wire cable connected to RXD, TXD and GND; Pin No. 4 (DTR) and Pin No. 6 (DSR) must be connected to the monitor. (The cable must be disconnected from the Monitor to be able to use the remote control and Monitor front panel controls.)

* With the RS-232 input connected, the Monitor cannot be controlled by both an external control device and the remote control at the same time. The Monitor can only be controlled by either the remote control or the external control device.

RS-232C configurations

7-wire configuration (Standard RS-232C cable)

PC			PDP	
RXD	2		3	TXD
TXD	3		2	RXD
GND	5		5	GND
DTR	4		6	DSR
DSR	6		4	DTR
RTS	7		8	CTS
CTS	8		7	RTS
	DB 9		DB 9	

Control line

3-wire configuration (Not standard)

PC			PDP	
RXD	2		3	TXD
TXD	3		2	RXD
GND	5		5	GND
DTR	4		4	DTR
DSR	6		6	DSR
RTS	7		7	RTS
CTS	8		8	CTS
	DB 9		DB 9	
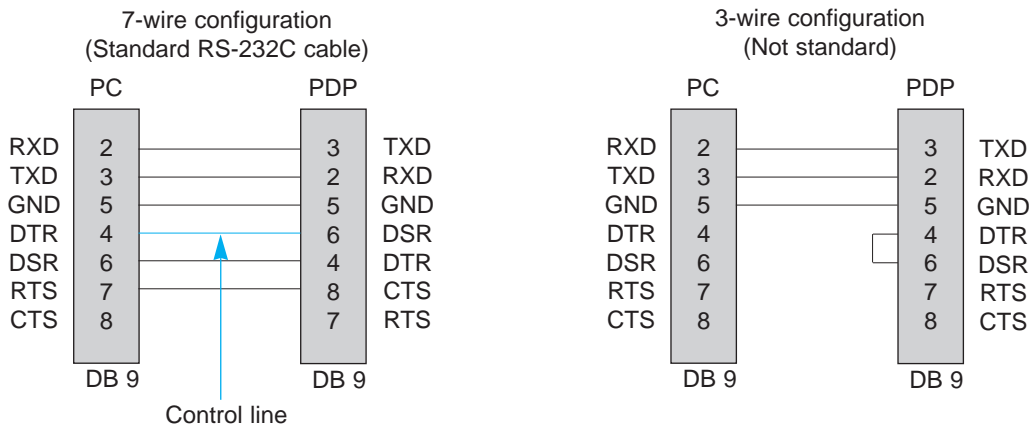
7-Wire Cable Configuration
• The Monitor is available to switch between external adjustment and remote control adjustment using a control line.
Note: If the control line is high, the monitor is controlled by the external control device. If the control line is low, the Monitor is controlled by the Monitor's remote control.
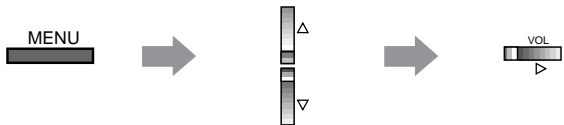
3-Wire Cable Configuration
• When using a 3-Wire cable configuration there is no control line. The external control device must put the Monitor into the "change into remote control adjustment mode" (see page 52). The Monitor will then be able to be controlled by the remote control. If the Monitor is turned back on, it will revert back to external device control.

SET ID

- Use this function to specify a monitor ID number.

READY

Press the **MENU** button and then press the ▲ / ▼ button to select the **SPECIAL** menu.
Press the ► button.

MENU

VOL
▷

1 Use the ▲ / ▼ buttons to select **SET ID** and then press the ► button.

VOL
▷

SPECIAL
LANGUAGE   ►
ARC   ►
SCREEN   ►
TRANSPARENCY   ►
PIP   ►
SET ID   ►   1
COLOR TEMP.   ►
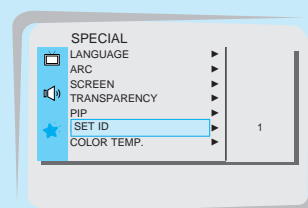
2 Use the ◄ / ► button to adjust **SET ID** to choose the desired monitor ID number.

- The adjustment range of **SET ID** is 1 ~ 99.

VOL   VOL
◁   ▷

OK

SPECIAL
LANGUAGE   ►
ARC   ►
SCREEN   ►
TRANSPARENCY   ►
PIP   ►
SET ID   ►   1
COLOR TEMP.   ►

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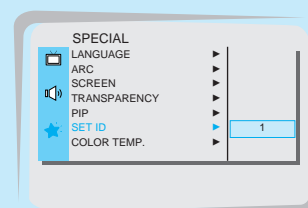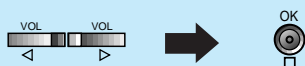
External Control Device Adjustments

- **The RS-232C input jack is used to control the Monitor's functions using an external control device.**

Communication Parameters

- Baud rate : 2400 bps (UART)
- Data length : 8 bits
- Parity : None
- Stop bit : 1 bit
- Communication code : ASCII code

* If the command interval is interrupted for more than 4 seconds, only Command 1 will be recognized.
Be careful when using the power command.

Command Reference List

NAME	COMMAND	DATA RANGE
01. Power	p	0 ~ 1
02. Input Select	i	0 ~ 3
03. Aspect Ratio	r	0 ~ 2
04. Screen mute	m	0 ~ 1
05. Volume mute	w	0 ~ 1
06. Volume control	v	0 ~ 64
07. Contrast	k	0 ~ 64
08. Brightness	b	0 ~ 64
09. Color	c	0 ~ 64
10. Tint	t	0 ~ 64
11. Sharpness	s	0 ~ 64
12. OSD select	d	0 ~ 1
13. Abnormal state	a	0 ~ 1
14. PIP	z	0 ~ 3
15. PIP input select	e	0 ~ 1
16. PIP sound select	u	0 ~ 1
17. PIP position	x	0 ~ 3
18. remote control adjustment mode	j	0 ~ 1

Transmission / Receiving Protocol

Transmission

[Command][ ][Set ID][ ][Data][Cr]

* [Command] : To control PDP set.
* [Set ID]   : You can adjust the set ID to choose desired monitor ID number in special menu. See page 47. Adjustment range is 1 ~ 99.
When selecting Set ID '0', every connected PDP set is controlled.
* [DATA]   : To transmit command data. Transmit 'FF' data to read status of command.
* [Cr]   : Carriage Return ASCII code '0x0D'
* [ ]   : ASCII code 'space (0x20)'

OK Acknowledgement

[Set ID][:][OK][x][Data][x]

* The Monitor transmits ACK (acknowledgement) based on this format when receiving normal data. At this time, if the data is data read mode, it indicates present status data. If the data is data write mode, it returns the data of the PC computer.

Error Acknowledgement

[Set ID][:][NG][x]

* The Monitor transmits ACK (acknowledgement) based on this format when receiving abnormal data from non-viable functions or communication errors.

01. Power (Command:p)

► To control Power On/Off of the Monitor.

Transmission

[p][ ][Set ID][ ][Data][Cr]

Data 0 : Power Off
      1 : Power On

* Example : Power on for set ID No.3.
  Type : P 3 1 '0x0D'

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Power Off
      1 : Power On

* In example : Monitor Acknowledges power on for set ID
  No.3.

► To show Power On/Off.

Transmission

[p][ ][Set ID][ ][FF][Cr]

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Power Off
      1 : Power On (RGB)
      2 : Power On (Video)
      3 : Power On (Component)
      4 : Power On (S-Video)

* In like manner, if other functions transmit 'FF' data
  based on this format, Acknowledgement data feed
  back presents status about each function.

02. Input select (Command:i)

► To select input source for the Monitor.
  You can also select an input source using the INPUT
  SELECT button on the Monitor's remote control.

Transmission

[i][ ][Set ID][ ][Data][Cr]

Data 0 : RGB
      1 : AV (Video)
      2 : Component
      3 : S-AV (S-Video)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : RGB
      1 : AV (Video)
      2 : Component
      3 : S-AV (S-Video)

03. Aspect Ratio (Command:r)

► To adjust the screen format.
  You can also adjust the screen format using the ARC
  (Aspect Ratio Control) button on remote control or in
  the Special menu.

Transmission

[r][ ][Set ID][ ][Data][Cr]

Data 0 : Wide screen (16:9)
      1 : Normal screen (4:3)
      2 : Full screen (Zoom)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Wide screen (16:9)
      1 : Normal screen (4:3)
      2 : Full screen (Zoom)

* Using the PC input, you select either 16:9 or 4:3 screen
  aspect ratio.
* Using the DTV 720p/1080i input, you can only select
  16:9 screen aspect ratio.

04. Screen mute (Command:m)

► To select screen mute on/off.

Transmission

[m][ ][Set ID][ ][Data][Cr]

Data 0 : Screen mute on (Picture off)
      1 : Screen mute off (Picture on)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Screen mute on (Picture off)
      1 : Screen mute off (Picture on)

05. Volume mute (Command:w)

► To control volume mute on/off.
  You can also adjust mute using the MUTE button on
  remote control.

Transmission

[w][ ][Set ID][ ][Data][Cr]

Data 0 : Volume mute on (Volume off)
      1 : Volume mute off (Volume on)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Volume mute on (Volume off)
      1 : Volume mute off (Volume on)

External Control Device Adjustments

06. Volume control (Command:v)

► To adjust volume.
  You can also adjust volume with the volume buttons on remote control.

Transmission

[v][ ][Set ID][ ][Data][Cr]

Data   Min : 0 ~ Max : 64
          * Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data   Min : 0 ~ Max : 64

07. Contrast (Command:k)

► To adjust screen contrast.
  You can also adjust contrast in the Picture menu.

Transmission

[k][ ][Set ID][ ][Data][Cr]

Data   Min : 0 ~ Max : 64
          * Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data   Min : 0 ~ Max : 64

08. Brightness (Command:b)

► To adjust screen brightness.
  You can also adjust brightness in the Picture menu.

Transmission

[b][ ][Set ID][ ][Data][Cr]

Data   Min : 0 ~ Max : 64
          * Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data   Min : 0 ~ Max : 64

09. Color (Command:c)

► To adjust the screen color.
  You can also adjust color in the Picture menu.

Transmission

[c][ ][Set ID][ ][Data][Cr]

Data   Min : 0 ~ Max : 64
          * Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data   Min : 0 ~ Max : 64

10. Tint (Command:t)

► To adjust the screen tint.
  You can also adjust tint in the Picture menu

Transmission

[t][ ][Set ID][ ][Data][Cr]

Data   Red : 0 ~ Green : 64
          * Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data   Red : 0 ~ Green : 64

11. Sharpness (Command:s)

► To adjust the screen sharpness.
  You can also adjust sharpness in the Picture menu

Transmission

[s][ ][Set ID][ ][Data][Cr]

Data   Min : 0 ~ Max : 64
          * Refer to 'Real data mapping' as shown below.

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data   Min : 0 ~ Max : 64

* **Real data mapping**

  0 : Step 0
  ⋮
  A : Step 10
  ⋮
  F : Step 15
  10 : Step 16
  ⋮
  64 : Step 100

12. OSD select (Command:d)

▶ To select OSD (On Screen Display) on/off.

Transmission

[d][ ][Set ID][ ][Data][Cr]

Data 0 : OSD off
      1 : OSD on

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : OSD off
      1 : OSD on

* The remote control and Monitor front panel controls
  (except main power) are not operable when the Monitor
  is set up to be controlled by the PC computer.

13. Abnormal state (Command:a)

▶ To recognize an abnormal state.

Transmission

[a][ ][Set ID][ ][FF][Cr]

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : OK
      1 : Fan alarm
      2 : 5V down
      3 : AC down

* This function is "read only".

14. PIP (Command:z)

▶ To control PIP (Picture-in-Picture). You can also control
  PIP using the pip button on remote control or in the
  Special menu.

Transmission

[z][ ][Set ID][ ][Data][Cr]

Data 0 : PIP off
      1 : PIP (small)
      2 : PIP (large)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : PIP off
      1 : PIP (small)
      2 : PIP (large)

* PIP only works in the following resolutions:
  RGB PC 640x480 (VGA) / 800x600(SVGA) / 1024x768
  (XGA) (only in vertical frequency 60Hz),
  Component 480p / 720p / 1080i.

15. PIP input select (Command:e)

▶ To select input source for sub picture in PIP mode.
  You can also select source using PIP input button on
  the remote control or in the Special menu.

Transmission

[e][ ][Set ID][ ][Data][Cr]

Data 0 : AV (VIDEO)
      1 : COMPONENT
      2 : S-AV (S-VIDEO)

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : AV (VIDEO)
      1 : COMPONENT
      2 : S-AV (S-VIDEO)

* COMPONENT source only works with 480i input signal.

External Control Device Adjustments

16. PIP sound select (Command:u)

► To select main or sub (inset) sound for PIP.
You can also select sound select in PIP on the special menu.

Transmission

[u][ ][Set ID][ ][Data][Cr]

Data 0 : Main picture sound
      1 : Sub picture sound

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Main picture sound
      1 : Sub picture sound

* COMPONENT source only works in 480i input signal.

17. PIP position (Command:x)

► To select sub picture position for PIP.
You can also adjust the sub picture position using the position button on the remote control or in PIP on the Special menu.

Transmission

[x][ ][Set ID][ ][Data][Cr]

Data 0 : Right down on screen
      1 : Left down on screen
      2 : Left up on screen
      3 : Right up on screen

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : Right down on screen
      1 : Left down on screen
      2 : Left up on screen
      3 : Right up on screen

18. Change into Remote control adjustment mode (Command:j)

► To control the Monitor with the remote control while the cable is still connected.

Transmission

[j][ ][Set ID][ ][Data][Cr]

Data 1 : Remote control adjustment mode

Acknowledgement

[Set ID][:][OK][x][Data][x]

Data 0 : PC adjustment mode
      1 : Remote control adjustment mode

* If external equipment commands the Monitor to "change into remote control adjustment mode", the Monitor can only be adjusted by the remote control. To revert the Monitor control to external control device adjustment, turn the Monitor off and then on again.

Maintenance

- **Early malfunction can be prevented. Careful and regular cleaning can extend the amount of time you will have with your new Monitor. Be sure to turn the power off and unplug the power cord before you begin any cleaning.**

Cleaning the screen

1. Here's a great way to keep the dust off your screen for a while. Wet a soft cloth in a mixture of lukewarm water and a little fabric softener or dish washing detergent. Wring the cloth until it's almost dry, and then use it to wipe the screen.

2. Make sure the excess water is off the screen, and then let it air-dry before you turn on your Monitor.

Cleaning the cabinet

To remove dirt or dust, wipe the cabinet with a soft, dry, lint-free cloth. Please be sure not to use a wet cloth.

Extended absence

⚠ If you leave your Monitor dormant for a long time (such as a vacation), it's a good idea to unplug the power cord to protect against possible damage from lightning or power surges.

Safety instructions

Monitor Overview

Connections

Basic operation

Sleep timer

Picture & Sound

Special features

Others

Troubleshooting check list

No picture & No sound	• Check whether the Monitor is turned on. • Power cord inserted into wall outlet? • Plug another product's power cord into the wall outlet where the Monitor's power cord was plugged in.

Picture OK & No sound	• Press the **VOLUME** (▶) button. • Sound muted? Press **MUTE** button.

The remote control doesn't work	• Check to see if there is any object between the Plasma Display and the remote control causing obstruction. • Check to see if the batteries are installed with the correct polarities. (Refer to p.29) • Install new batteries. (Refer to p.29)

No or Poor color or Poor picture	• Select **COLOR** in the **PICTURE** menu and press the **VOLUME** (▶) button. (Refer to p.35) • Increase the distance between the Monitor and the VCR. • Activate any function to restore the brightness of the picture. (If still picture is on the screen for more than 5 minutes, the screen gets dark.)

No output from one of the speakers	• Adjust **BALANCE** in the **SOUND** menu. (Refer to p.37)

Product specifications

MODEL	MU-42PZ11/A/B/G/K/S MU-42PZ15/A/B/G/K/S
Width (inches / mm)	41.6 / 1056
Height (inches / mm)	25 / 635
Depth (inches / mm)	3.2 / 82
Weight (pounds / kg)	72.1 / 32.7
Power requirement	120V, 60Hz
Resolution	852 x 480 (Dot)
Color	16,770,000 (256 steps of each R, G and B)

• The specifications shown above may be changed without prior notice for quality improvement.

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